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Stantec

August 18, 2008

Mr. Robert Rau
United States Environmental Protection Agency, Region 10
Indian Lands Coordinator/LUST Project Manager
Seattle Regional Area Office
1200 Sixth Avenue, OCE-082
Seattle, Washington 98101

RE: Request for Environmental Closure ConocoPhillips Site No. 256357 (RMR #2926)

3323 Marine Drive Northeast, Marysville, Washington

Dear Mr. Robert Rau:

Stantec Consulting Corporation (Stantec), on behalf of ConocoPhillips Company (ConocoPhillips), requests a site closure determination for ConocoPhillips facility #256357 located at 3323 Marine Drive Northeast in Marysville, Washington (site). Residual soil impacts and groundwater monitoring results are described below. Two figures showing site location (Figure 1) and well locations (Figure 2) are attached. Soil analytical results from August 2006 and groundwater analytical results from seven quarters of monitoring between 2006 through 2008 are provided in Attachment A. Graphs of groundwater sampling data showing hydrocarbon constituents exceeding laboratory detection limits but not exceeding the Model Toxics Control Act Method A (MTCA) cleanup levels at two wells are provided in Attachment B.

The site is located in unincorporated Snohomish County and on Tulalip Tribes reservation land. It is situated northwest of the intersection of Marine Drive and 33rd Avenue Northeast and west of an Interstate 5 off-ramp, in Marysville, Washington. The site has been a retail gasoline station since 1970. Three hydraulic hoists were installed on the north side of the building and used prior to 1996 through 2005 as part of the retail gasoline and auto service operations at the site. The site includes a convenience store, four pump islands covered with a canopy, and two 15,000-gallon double-walled fiberglass gasoline underground storage tanks (USTs). The site is paved with asphalt or concrete, has a large parking area west and south of the convenience store, and has landscaped areas on its borders.

The immediate area surrounding the site consists of a mix of commercial properties and vacant land. A McDonald's restaurant and a hotel are located north of the site and a parking lot is situated immediately to the west. A hotel and restaurant are located across Marine Drive to the south. An Interstate 5 off-ramp is located east of the site.

Sensitive receptors within a ½-mile radius of the site include surface water bodies, wetlands, City of Marysville Junior and Senior High Schools, utility vaults and water wells. The City of Marysville Junior and Senior High Schools are located approximately 0.65 miles east-northeast of the site. Quilceda Creek and Ebey Slough are located west and south of the site, respectively, and are the only major surface water bodies located within a ½-mile radius of the site. According to the Washington State Department of Ecology (Ecology) Well Logs Database,

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four water supply wells and 78 resource protection wells are located within a ½-mile radius of the site. A well log search performed by Environmental Data Resources, Inc., identified one well within the ½-mile search radius after a search of the federal FRDS Public Water Supply System Information. This well is located approximately 0.42 miles east of the site. The well log search also produced information for 10 USGS wells located north and northwest of the site and within a 1/2-mile of the site (SECOR, 2004).

HYDROGEOLOGIC CONDITIONS

Soils encountered during the previous environmental investigation activities generally consisted of tan silty sands and tan to grayish brown sands with a trace of gravel. These soils extended from ground surface to approximately 20 feet below grade.

SECOR supervised the installation of 8 monitoring wells (MW-1 through MW-8) in August 2006. Groundwater levels in the monitoring wells ranged over seven quarters between 9.80 feet below grade (MW-5) to 12.95 feet below grade (MW-8).

Based on groundwater elevation data collected from the on-site monitoring wells, the inferred groundwater flow direction is to the south and southwest. This direction was consistent for the seven groundwater monitoring events between August 2006 and February 2008. The groundwater gradient beneath the site appears to be relatively flat, varying from approximately 0.002 foot/foot to 0.003 foot/foot during those events.

RESIDUAL SOIL CONTAMINATION

Hydraulic Hoists

Three hydraulic hoists were previously located in the service bays of the retail gas station at the site. The hoists were removed between 1996 and 2005.

Two separate hydraulic fluid releases from the hoists occurred between May and September 1996 (Johnson, 1998). The first release was approximately 50 gallons from a cracked hydraulic fluid line. The second release was from a cracked hydraulic hoist cylinder. Both releases were reported to the Washington Department of Ecology (Ecology) and United States Environmental Protection Agency (USEPA). The site is on Native American land and is under the jurisdiction of the USEPA. The fluid line was repaired and the hoist cylinder was replaced. GeoEngineers collected soil samples near the leaking hydraulic fluid line and reported hydrocarbon concentrations ranged from less than 1,000 milligrams per kilogram (mg/kg) to 51,000 mg/kg. Concentrations of hydrocarbons in the soil samples collected from the hoist removal excavation ranged from 2,000 mg/kg to 28,000 mg/kg. Remedial soil excavation activities were not conducted at that time.

North Hoist Area

In January 2005, SECOR sampled soils during the removal of a hydraulic hoist from the north service bay located in the station building (SECOR, 2005). The hoist was removed and found to be in generally good condition, and the excavation was extended to approximately 8 feet below grade. One confirmatory soil sample, EX-1, was collected from approximately eight feet below grade at the base of the hoist excavation. Petroleum hydrocarbon concentrations detected in

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soil sample EX-1 included 130 mg/kg diesel-range hydrocarbons and 2,300 mg/kg heavy oil range hydrocarbons. Since the concentration exceeded the MTCA Method A cleanup level for heavy oil hydrocarbons in the sample collected from the vertical limit of the excavation, the additional excavation was performed to remove impacted soils and to collect a confirmatory sample at a deeper location. The excavation was enlarged and none of the second round of samples collected from the base and sidewalls of the excavation had detectable concentrations of diesel range hydrocarbons.

The soil sample, "Bottom", collected at 10.5 feet below grade indicated a heavy oil range hydrocarbon concentration of 4,700 mg/kg. The "North Wall" sample, collected 9 feet below grade along the north excavation sidewall, had a heavy oil range hydrocarbon concentration of 980 mg/kg. The West Wall sample, collected 9 feet below grade along the west sidewall, had a heavy oil range hydrocarbon concentration of 640 mg/kg. It was concluded that the sampling results showed that impacted soils were present directly beneath the hoist cylinders with little lateral migration and residual heavy oil range hydrocarbons were present in the sandy soils. No further excavation was performed. A total of 14.33 tons of impacted soil was removed from the north hoist excavation area and transported off site. The excavation was backfilled with clean, imported fill. The service bay area was later converted into a retail area consistent with use as a convenience store.

Central Hoist Area

Confirmatory soil sampling was performed by SECOR during removal of the central hydraulic hoist in July 2002 (SECOR, 2002). Two confirmatory soil samples (EX1-1 and EX1-2) were collected from the bottom of the hoist excavation, approximately 8.5 feet below grade. Diesel range organics, heavy oil range organics, Aroclor 1254 (a polychlorinated biphenyl [PCB]), arsenic, barium, chromium and lead were detected in both samples. The detected concentrations did not exceed the MTCA Method A cleanup levels for these compounds.

A new hydraulic hoist was installed in this area after 2002 and removed prior to January 2005. No sample results from when this hoist was removed were available for review.

South Hoist Area

Stantec did not have or review information or data regarding removal of the hoist originally installed in the south automobile repair bay (south hoist).

A new hydraulic hoist was installed in the south bay between 2002 and 2005 and removed prior to January 2005. No sample results from when this hoist was removed were available for review.

Other Residual Soil Impacts

Two steel 10,000-gallon gasoline underground storage tanks (USTs), two steel 550-gallon heating oil and waste oil USTs, product lines and fuel dispensers were installed in 1970. The removal of two steel USTs and other site features occurred in September and October 1995 (GeoEngineers, 1996). Ten soil samples from the limits of the combined former steel gasoline, heating oil and waste oil UST excavation, three soil samples beneath the former product lines and 10 soil samples from under the fuel dispensers were collected. Analytical results for two

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samples collected during the site decommissioning activities exceeded the MTCA Method A cleanup levels. A concentration of 210 mg/kg gasoline-range hydrocarbons were detected in soil sample SWC-10.5, collected from 10.5 feet below grade at the southwest corner of the UST excavation. This concentration exceeded the MTCA Method A cleanup level of 100 mg/kg. Analytical results indicate that MTCA Method A cleanup levels were not exceeded in other samples collected from the UST excavation (GeoEngineers, 1995).

Gasoline range hydrocarbons, toluene and total xylenes concentrations were detected at levels exceeding the MTCA Method A cleanup levels in soil sample FI1-1-3.5, collected from beneath a product line elbow at the north end of the westernmost pump island at a depth of 3.5 feet below grade. The sample location was over-excavated and a second soil sample was collected 2 feet deeper, at 5.5 feet below grade. Gasoline range hydrocarbons and toluene and total xylenes concentrations did not exceed MTCA Method A cleanup levels in confirmatory soil sample FI1-1-5.5 (GeoEngineers, 1996).

DATA EVALUATION

Stantec evaluated current and historic site-specific soil and groundwater data to evaluate whether or not a closure recommendation for the site was justified. These data included:

- A concentration of 210 mg/kg gasoline-range hydrocarbons were detected in soil sample SWC-10.5, collected from 10.5 feet below grade at the southwest corner of the UST excavation (GeoEngineers, 1995).
- Petroleum hydrocarbon concentrations ranged from less than 1,000 mg/kg to 51,000 mg/kg from soil samples collected after a leaking hydraulic fluid line was discovered and reported in 1996 (Johnson, 1998).
- Petroleum hydrocarbon concentrations in the soil samples collected from the hoist removal excavation ranged from 2,000 mg/kg to 28,000 mg/kg in 1996 (Johnson, 1998).
- Petroleum hydrocarbon concentrations detected in soil sample EX-1 from the northern hoist removal excavation in 2005 included 130 mg/kg diesel-range hydrocarbons and 2,300 mg/kg heavy oil range hydrocarbons (SECOR, 2005).
- The soil sample, "Bottom", collected at 10.5 feet below grade in the northern hoist removal excavation indicated a heavy oil range hydrocarbon concentration of 4,700 mg/kg. The "North Wall" sample, collected at 9 feet below grade from the north excavation sidewall had a heavy oil range hydrocarbon concentration of 980 mg/kg. The West Wall sample, collected at 9 feet below grade from the west sidewall had a heavy oil range hydrocarbon concentration of 640 mg/kg (SECOR, 2005).

Based on Stantec's evaluation, the following observations, facts, and trends are apparent that support a closure recommendation:

Removal and over-excavation of the USTs and associated piping were performed in accordance with Ecology guidance. These activities appear to be successful based on the data provided, which indicate that residual petroleum constituents in soil did not exceed MTCA Method A cleanup levels. In addition, groundwater beneath the UST area was not impacted. Therefore,

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there appears to be no evidence of future potential risk to human health or the environment from these activities or any residual petroleum constituents left in-place beneath the UST area. Therefore, the results of these activities support a recommendation for site closure.

The hoist excavations were performed in accordance with Ecology compliance sampling requirements for these devices. Hoist removal and associated soil excavation encountered petroleum-impacted soils beneath the north and central hoist locations, the majority of which was reportedly removed prior to collecting samples from the limits of the excavations. No data were available regarding the south hoist removal.

Analytical results for samples collected from the limits of the north and central hoist excavations indicate a relatively minor, localized volume of diesel-range and oil-range hydrocarbon concentrations exceeding MTCA Method A cleanup levels were left in-place beneath the north hoist only. The magnitude of the residual hydrocarbon concentrations beneath the north hoist appear relatively low compared to the MTCA Method A cleanup level and likely represent the highest concentrations left in-place, since excavation at more shallow depths would have removed soil located nearer to the source of the release that presumably contained higher concentrations. Based on the relatively low magnitude of the residual hydrocarbons, the potential volume of soil containing petroleum hydrocarbons that exceed MTCA Method A cleanup levels appears comparatively small, although an accurate estimate cannot be calculated based on the data reviewed.

The petroleum hydrocarbons left in-place beneath the north hoist consisted of heavier-range hydrocarbons in a shallow soil environment, and did not impact underlying groundwater based on the descriptions and data provided in the reports reviewed by Stantec. The area overlying all of the hoist areas is capped by relatively impervious surfaces of concrete and/or asphalt pavement, as is the majority of the site. In this setting, the heavier-range hydrocarbons left in-place would not be expected to be exposed to leaching by infiltrating surface water, and potential future risks to groundwater would effectively be minimized. Conversely, the residual hydrocarbons in the relatively shallow subsurface environment would be exposed to the processes of natural biodegradation, and would be expected to decrease over time, further reducing potential future risk to human health and the environment. These factors and the data presented in the previous two paragraphs support a closure recommendation.

Finally, seven groundwater monitoring wells (MW-1 to MW-8) currently exist at the site that are currently monitored on a quarterly basis. The wells are located up-gradient, cross-gradient, and down-gradient from the hoist areas. No concentrations of petroleum hydrocarbon constituents have been detected at concentrations exceeding MTCA Method A cleanup levels in any of these wells during the last seven quarters of groundwater monitoring. The time-frame of groundwater monitoring is sufficient to include seasonal groundwater fluctuations, and sufficient to evaluate potential leaching to and subsequent migration in groundwater. There is no evidence of leaching of residual petroleum concentrations in soil or impact to groundwater based on the on-going groundwater monitoring results. These results provide further evidence in support of a closure recommendation for the site, because they confirm the apparent lack of off-site transport mechanisms to nearby receptors, demonstrate the long-term effectiveness of UST and hoist removal activities, and provide further evidence that residual petroleum concentrations do not pose a future risk to human health and the environment.

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CONCLUSIONS

Based on the data reviewed and evaluated by Stantec, a recommendation for site closure and a conclusion of environmental activities at the site is warranted, including but not limited to ongoing groundwater monitoring activities. Stantec's recommendation in based on a thorough review of site-specific historical and on-going soil and groundwater monitoring data. Evaluation results indicate that relatively low concentrations of diesel-range and heavy-oil range petroleum hydrocarbons were left in-place beneath the north hoist area. However, the magnitude of these concentrations is relatively low, and the volume of the residual impact in soil appears to be relatively small. There is no evidence that the former release from the north hoist impacted groundwater. The area overlying the former UST and hoist locations is capped by concrete and/or asphalt pavement. Most importantly, on-going groundwater monitoring results indicate no evidence of leaching of residual petroleum concentrations in soil to the underlying groundwater.

Based on these data and Stantec's evaluation, Stantec recommends that the USEPA assign a "no further action" status, or an equivalent status of closure to the site that will conclude environmental activities at the site. Upon receipt of your closure notification Stantec will make arrangements to properly abandon the existing groundwater monitoring wells and submit a well abandonment report to USEPA and other interested parties.

LIMITATIONS AND CERTIFICATIONS

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of ConocoPhillips Company for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third party information, but Stantec cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigations. No other warranties, expressed or implied are made by Stantec.

If you have any questions regarding this investigation, please contact Katlin Hanson at 425-372-1659 or at Katlin.Hanson@stantec.com.

Sincerely,

CC:

Stantec Consulting Corporation

Katlin Hanson

Project Geologist

Jeffrey S. Thompson, L.G.,

Principal Geologist

Mr. Michael Noll, ConocoPhillips Company - Risk Management & Remediation

JEFREY S. THOMPSON

LIST OF FIGURES

Figure 1 – Site Location Map Figure 2 – Site Plan with Well Locations

LIST OF ATTACHMENTS

ATTACHMENT A AUGUST 2006 SUBSURFACE ASSESSMENT SOIL ANALYTICAL

RESULTS AND QUARTERLY GROUNDWATER ANALYTICAL RESULTS

ATTACHMENT B GRAPHS OF GROUNDWATER ANALYTICAL RESULTS PER

MONITORING WELL

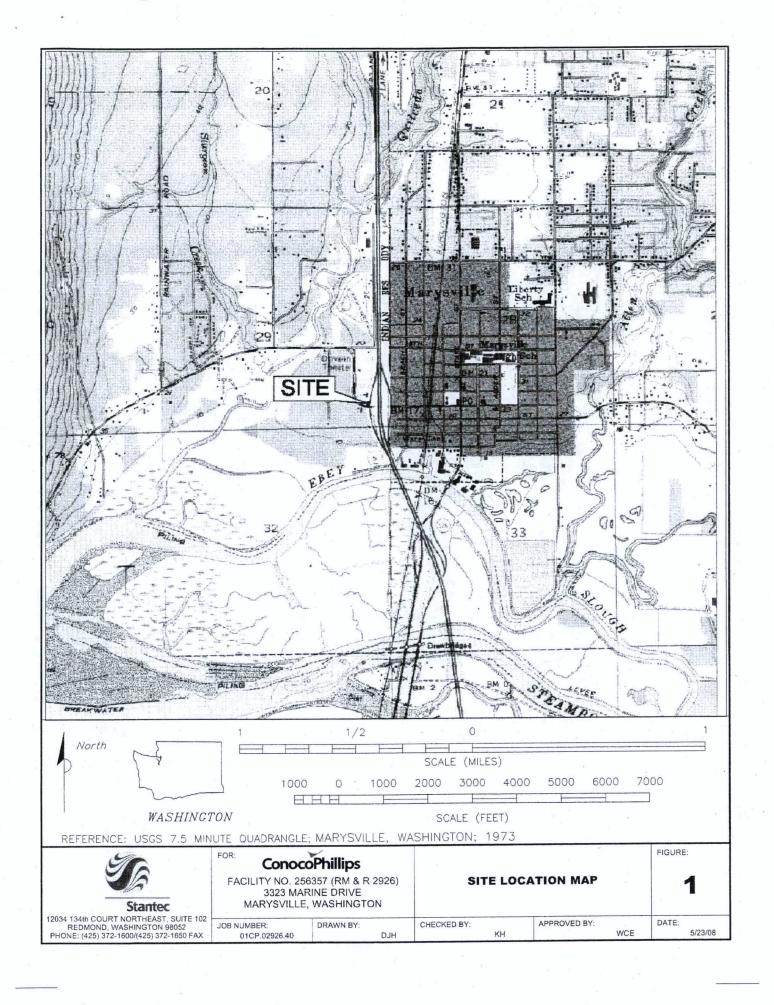
REFERENCES

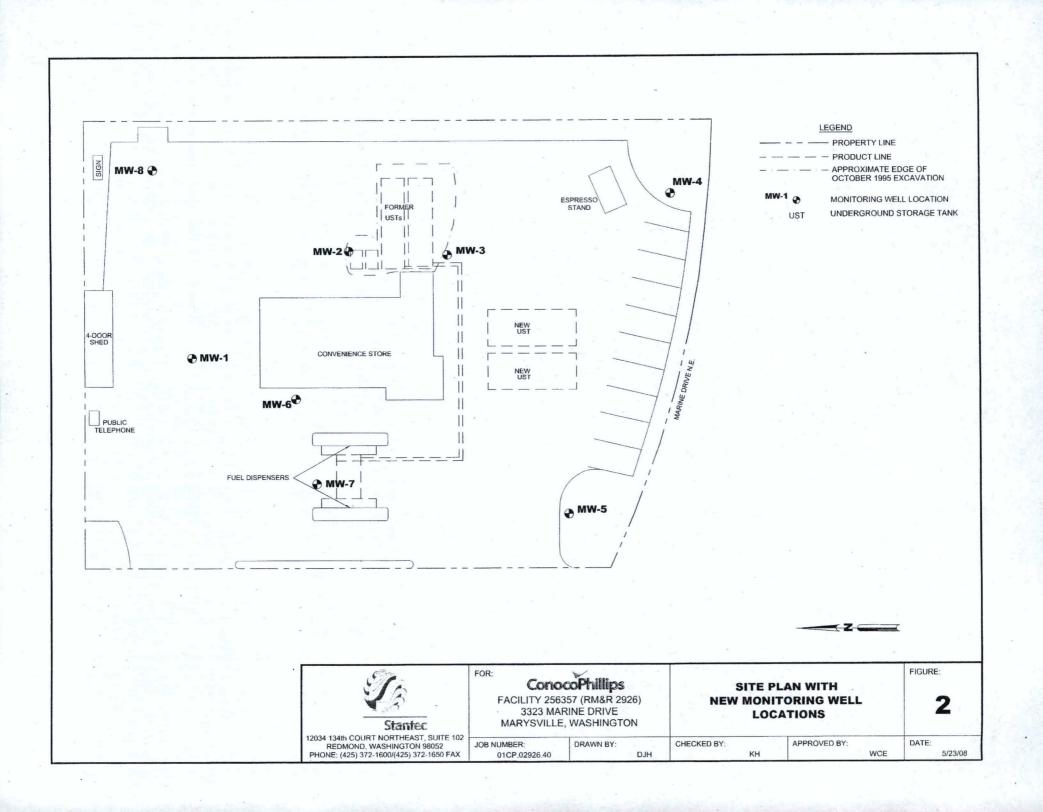
The following reports were prepared and submitted to the EPA:

- GeoEngineers, Inc., 1995. Memorandum to Don Wyll, Unocal Service Station #6357, Marysville, WA.
- GeoEngineers, Inc., 1996. Report of Environmental Services, Underground Storage Tank Removal Monitoring, Unocal Service Station 6357, Marysville, Washington.
- GeoEngineers, Inc., 1996. Memorandum to Howard Brinkerhoff, Unocal ERS, Unocal SS 6357, Marysville, WA.
- GeoEngineers, Inc. 1997. Baseline Due Diligence Data/Areas of Concern spreadsheet.
- Johnson, Tim. "Marysville Site." E-mail to Jim Roth. 15 September. 1998.
- Robert H. Lee & Associates, Inc., undated. Site Plan, S.S. No. 6357, 6425 33rd Avenue SE, Marysville, Snohomish Co., Washington.
- SECOR International, Inc., 2002. Summary Report, Hydraulic Hoist Removal for TOSCO Facility No. 256357, 3323 Marine View Drive, Marysville, Washington, Project No. 01TO.10614.01.
- SECOR International, Inc., 2004. Sensitive Receptor Survey, ConocoPhillips Site No. 6357, 3323 Marine Drive NE, Marysville, Washington 98271.
- SECOR International, Inc., 2005. Summary Report, Hydraulic Hoist Removal, ConocoPhillips Facility No. 256357, 3323 Marine View Drive, Marysville, Washington.
- SECOR International, Inc., 2005. Work Plan Subsurface Investigation, ConocoPhillips Site No. 256357, 3323 Marine Drive Northeast, Marysville, Washington.
- SECOR International, Inc., 2007. Subsurface Investigation, ConocoPhillips Site No. 256357 (RMR #2926), 3323 Marine Drive Northeast, Marysville, Washington
- SECOR International, Inc., 2007. Third Quarter 2006 Groundwater Monitoring Report.
- SECOR International, Inc., 2007. Fourth Quarter 2006 Groundwater Monitoring Report.
- SECOR International, Inc., 2007. First Quarter 2007 Groundwater Monitoring Report.
- SECOR International, Inc., 2007. Second Quarter 2007 Groundwater Monitoring Report.
- SECOR International, Inc., 2007. Third Quarter 2007 Groundwater Monitoring Report.
- SECOR International, Inc., 2008. Fourth Quarter 2007 Groundwater Monitoring Report.

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FIGURES





ATTACHMENT A AUGUST 2006 SUBSURFACE ASSESSMENT SOIL ANALYTICAL RESULTS AND QUARTERLY GROUNDWATER ANALYTICAL RESULTS

Request for Environmental Closure ConocoPhillips Site No. 256357 3323 Marine Drive Northeast, Marysville, Washington August 18, 2008

TABLE 1 SOIL ANALYTICAL RESULTS

ConocoPhillips Site No. 256357 3323 Marine Drive Northeast Marysville, Washington

				tal Petroleu ydrocarbon		Volatile Organic Compounds											Metals			
Sample Identification	Sample Date	Sample Depth (feet bgs)	PID Field Screen (ppm)	TPH-g (mg/kg)	Diesel- Range (mg/kg)	Heavy- Range (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	PAHs (mg/kg)	EPH (mg/kg)	VPH (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)	HVOCs	PCBs (mg/kg)	Total Lead (mg/kg)
MW-1@10'	8/8/06	10	0	<1.1 ^a	<3.0	<10	<0.0006	0.001 ^b	<0.001	< 0.001			1							
MW-2@10'	8/9/06	10	0	<1.2ª	<3.0	<10	<0.0005	<0.001	<0.001	<0.002	<0.001	<0.001	ND	ND	ND	<0.0005	<0.001	0.001 °	ND	2.84
MW-3@10'	8/9/06	10	0	<1.1 ^a	<3.0	<10	<0.0005	0.002	<0.001	0.001	-	-				-				
MW-4@5'	8/8/06	5	0	<1.2ª	<3.0	<10	< 0.0005	<0.001	<0.001	<0.001										
MW-5@5'	8/8/06	5	0	<1.1ª	<3.0	<10	< 0.0006	< 0.001	<0.001	< 0.001							/			
MW-6@10'	8/9/06	10	0.7	<1.0 ^a	<3.0	<10	<0.0005	< 0.001	<0.001	<0.001	-									
MW-7@10'	8/9/06	10	0	<1.1ª	<3.0	<10	<0.0006	< 0.001	<0.001	<0.001	< 0.001	<0.001	ND	ND	ND	<0.0006	<0.001			2.58
MW-8@5'	8/9/06	5	0	<1.1ª	<3.0	<10	<0.0005	<0.001	<0.001	<0.001	-	ý :	-	-			-			
MTCA Level A	A Cleanup	Levels		30/100*	2,000	2,000	0.03	7	6	9-	0.005					0.1	5		1**	250

Notes:

BOLD - Concentration above MTCA Method A Cleanup Level

ND = Less than the stated laboratory method detection limit

-- = Not analyzed, not applicable, or not sampled All concentrations in milligrams per kilogram (mg/kg).

bgs = below ground surface

Total petroleum hydrocarbons as gasoline (TPH-g) by Northwest Method NWTPH-Gx

Diesel range and heavy range organics by Northwest Method NWTPH-Dx Modified with Silica Gel Acid Cleanup

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW846/8260B.

EDB = 1,2-dibromoethane; EDC = 1,2-dichloroethane by EPA Method SW846/8260B

PAHs = Polycyclic aromatic hydrocarbons by SW846/8270C SIM

EPH = extractable petroleum hydrocarbons by WA Ecology EPH Method

VPH = volatile petroleum hydrocarbons by WA Ecology VPH Method

MTBE = methyl tert-butyl ether by EPA Method SW846/8260B

Naphthalene by EPA Method SW846/8270C SIM

HVOCs = Halogenated volatile organic compounds by EPA Method SW846/8260B

PCBs = Polychlorinated biphenyls by EPA Method SW846/8082

Total lead by EPA Method SW846/6010B.

MTCA = Model Toxics Control Act (Chapter 173-340 WAC)

*Gasoline-range hydrocarbon cleanup level is 30 mg/Kg with benzene present in the sample, and 100 mg/Kg with no benzene detected.

^{**}Cleanup level based on applicable federal law (40 CFR 761.61) and a total value for all PCBs

^a The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were raised.

^b The value reported for toluene is probably due to carryover from the previous sample. Because only one sample vial was submitted for this analysis, the analysis could not be repeated.

^c Tetrachloroethene was detected at the method reporting limit (0.001 mg/kg).

TABLE 2 GROUNDWATER ANALYTICAL RESULTS - PAHs

ConocoPhillips Site No. 256357 3323 Marine Drive Northeast Marysville, Washington

Sample Identification	MW2
Sample Date	08/24/06
Analyte	
Acenaphthylene	<0.02
Acenaphthenea	<0.01
Fluorene	<0.01
Phenanthrene	0.041
Anthracene	<0.02
Fluoranthene	0.010
Pyrene	<0.02
Benzo(a)anthracene ^b	<0.02
Chrysene ^b	<0.02
Benzo(b)fluoranthene ^b	<0.02
Benzo(k)fluorantheneb	<0.01
Benzo(a)pyrene ^b	<0.02
Indeno(1,2,3-cd)pyrene ^b	<0.02
Dibenz(a,h)anthracene ^b	<0.02
Benzo(g,h,i)perylene ^b	<0.02
1-Methylnaphthalene	0.018
2-Methylnapththalene	0.017
Naphthalene	<0.01

Notes:

All concentrations in µg/L.

PAHs - polycyclic aromatic hydrocarbons

PAHs by EPA Method 8270-SIM

< = Less than the stated laboratory method reporting limit.

Several compounds were detected in the method blank associated with the sample. Sufficient sample was not available to re-extract the sample.

^a Noncarcinogenic PAHs

^b Carcinogenic PAHs

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS

ConocoPhillips Facility No. 256357 (RM&R 2926) 3323 Marine Drive Northeast Marysville, Washington

Well Name		Depth to Water (feet)			Total F	Aromatic Hydrocarbons					
	Sample Date		GW Elevation (feet)	Gasoline Range (ug/L)	Diesel Range (ug/L)	Heavy Range (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)
MW-1	08/24/06	12.13	85.31	48	77	97	0.5	0.7	0.8	0.8	0.5
97.44	11/13/06	11.95	85.49	48	76	95	0.5	0.7	8.0	0.8	0.5
	02/15/07	10.71	86.73	48	76	95	0.5	0.7	0.8	0.8	0.5
	05/03/07	10.65	86.79	50	76	95	0.5	0.7	0.8	0.8	0.5
	08/02/07	11.67	85.77	50	77	96	0.5	0.7	0.8	0.8	0.5
	11/01/07	12.25	85.19	50	76	95	0.5	0.7	0.8	8.0	0.5
	03/28/08	11.13	86.31	50	77	96	0.5	0.7	0.8	0.8	0.5
MW-2	08/24/06	12.10	85.24	48	77	96	1	1	1	3	1
97.34	11/13/06	11.90	85.44	48	75	94	0.5	0.7	0.8	0.8	0.5
37.04	02/15/07	10.64	86.70	48	76	94	0.5	0.7	0.8	0.8	0.5
	05/03/07	10.58	86.76	50	76	95	0.5	0.7	0.8	0.8	0.5
	08/02/07	11.63	85.71	50	75	94	0.5	0.7	0.8	0.8	0.5
	11/01/07	12.20	85.14	50	76	94	0.5	0.7	0.8	0.8	0.5
	03/28/08	11.12	86.22	50	76	96	0.5	0.7	0.8	0.8	0.5
MW-3	08/24/06	11.77	85.17	48	77	96	0.5	0.7	0.8	0.8	0.5
				48	77	96	0.5	0.7	0.8	0.8	0.5
96.94	11/13/06	11.57	85.37	48	75	94	0.5	0.7	0.8	0.8	0.5
	02/15/07	10.33	86.61	50	76	95	0.5	0.7	0.8	0.8	0.5
	05/03/07	10.25	86.69	50	75	94	0.5	0.7	0.8	0.8	0.5
	08/02/07	11.32	85.62		75	94	0.5	0.7	0.8	0.8	0.5
	11/01/07	11.90	85.04	50 50	76	95	0.5	0.7	0.8	0.8	0.5
	03/28/08	10.76	86.18	50	76	95	1 0.5	0.7	0.0	0.0	0.0
MW-4	08/24/06	11.43	84.97	48	77 🐇	96	0.5	0.7	0.8	0.8	0.5
96.40	11/13/06	11.20	85.20	48	77	96	0.5	0.7	0.8	0.8	0.5
	02/15/07	9.92	86.48	48	76	95	0.5	0.7	0.8	0.8	0.5
	05/03/07	9.85	86.55	50	76	95	0.5	0.7	0.8	0.8	0.5
	08/02/07	10.97	85.43	50	76	95	0.5	0.7	0.8	0.8	0.5
	11/01/07	11.55	84.85	50	75	93	0.5	0.7	0.8	0.8	0.5
	03/28/08	10.37	86.03	50	76	95	0.5	0.7	0.8	0.8	0.5

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS

ConocoPhillips Facility No. 256357 (RM&R 2926) 3323 Marine Drive Northeast Marysville, Washington

				Total F	Aromatic Hydrocarbons						
		Depth to	GW			-			Ethyl-	Total	
		Water	Elevation	Gasoline Range	Diesel Range	Heavy Range	Benzene	Toluene	benzene	Xylenes	MTBE
Well Name	Sample Date	(feet)	(feet)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L
MW-5	08/24/06	11.26	85.00	48	77	96	0.5	0.7	0.8	0.8	0.5
96.26	11/13/06	11.02	85.24	48	76	96	0.5	0.7	0.8	0.8	0.5
00.20	02/15/07	9.86	86.40	48	75	94	2	0.7	0.8	0.8	0.5
	05/03/07	9.80	86.46	50	76	95	0.5	0.7	0.8	0.8	0.5
	08/02/07	10.81	85.45	50	310	140	0.5	0.7	0.8	0.8	0.5
	11/01/07	11.35	84.91	50	75	94	0.5	0.7	0.8	0.8	0.5
	03/28/08	10.26	86.00	50	77	96	0.5	0.7	0.8	8.0	0.5
MW-6	08/24/06	12.20	85.24	48	78	97	0.5	0.7	0.8	0.8	0.5
97.44	11/13/06	12.02	85.42	48	76	96	0.5	0.7	0.8	0.8	0.5
07	02/15/07	10.81	86.63	48	76	95	0.5	0.7	0.8	0.8	0.5
	05/03/07	10.75	86.69	50	76	95	0.5	0.7	0.8	0.8	0.5
* -	08/02/07	11.75	85.69	50	75	94	0.5	0.7	0.8	0.8	0.5
	11/01/07	12.35	85.09	50	75	94	0.5	0.7	0.8	0.8	0.5
	03/28/08	10.46	86.98	50	77	96	0.5	0.7	0.8	0.8	0.5
MW-7	08/24/06	11.73	85.19	48	77	97	0.5	0.7	0.8	0.8	0.5
96.92	11/13/06	11.54	85.38	48	77	96	0.5	2	0.8	0.8	0.5
90.92	02/15/07	10.33	86.59	48	75	94	0.5	0.9	0.8	0.8	0.5
	05/03/07	10.33	86.65	50	76	95	0.5	0.7	0.8	0.8	0.5
	08/02/07	11.27	85.65	50	75	94	0.5	0.7	0.8	0.8	0.5
	11/01/07	11.85	85.07	50	75	94	0.5	0.7	0.8	0.8	0.5
	03/28/08	10.74	86.18	50	77	96	0.5	0.7	0.8	0.8	0.5
MW-8	08/24/06	12.95	85.41	<48	77	96	0.5	0.7	0.8	0.8	0.5
		12.75	85.61	<48	77	96	0.5	0.7	0.8	0.8	0.5
98.36	11/13/06	11.49	86.87	<48	75	94	0.5	0.7	0.8	0.8	0.5
	02/15/07	11.49	86.96	<50	76	95	0.5	0.7	0.8	0.8	0.5
	05/03/07		85.88	<50	76	94	0.5	0.7	0.8	0.8	0.5
	08/02/07 11/01/07	12.48	85.26	<50	77	97	0.5	0.7	0.8	0.8	0.5
		11.91	86.45	<50	77	96	0.5	0.7	0.8	0.8	0.5
	03/28/08	11.91	00.45		11	1 30	0.0	0.1	1 0.0	0.0	J.,

TABLE 3 CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS

ConocoPhillips Facility No. 256357 (RM&R 2926) 3323 Marine Drive Northeast Marysville, Washington

				Total P	Aromatic Hydrocarbons						
		Depth to Water		Gasoline Range	•	Heavy Range	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
Well Name	Sample Date A Cleanup Leve	(feet)	(feet)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)

NOTES:

All concentrations are in ug/L (ppb).

Wellhead elevations were taken from prior consultants reports.

Depth to water in feet below top of casing.

Groundwater elevation relative to top of casing elevation.

TPH-g = Gasoline range hydrocarbons by Ecology Method NWTPH-Gx.

TPH-d and TPH-o = Diesel and heavy oil range hydrocarbons, respectively, by Ecology Method NWTPH-Dx.

BTEX = Aromatic compounds by EPA Method 8260B; previous results by 8021B or 8260B, refer to laboratory reports.

MTBE = Methyl tert-butyl ether by EPA Method 8260B.

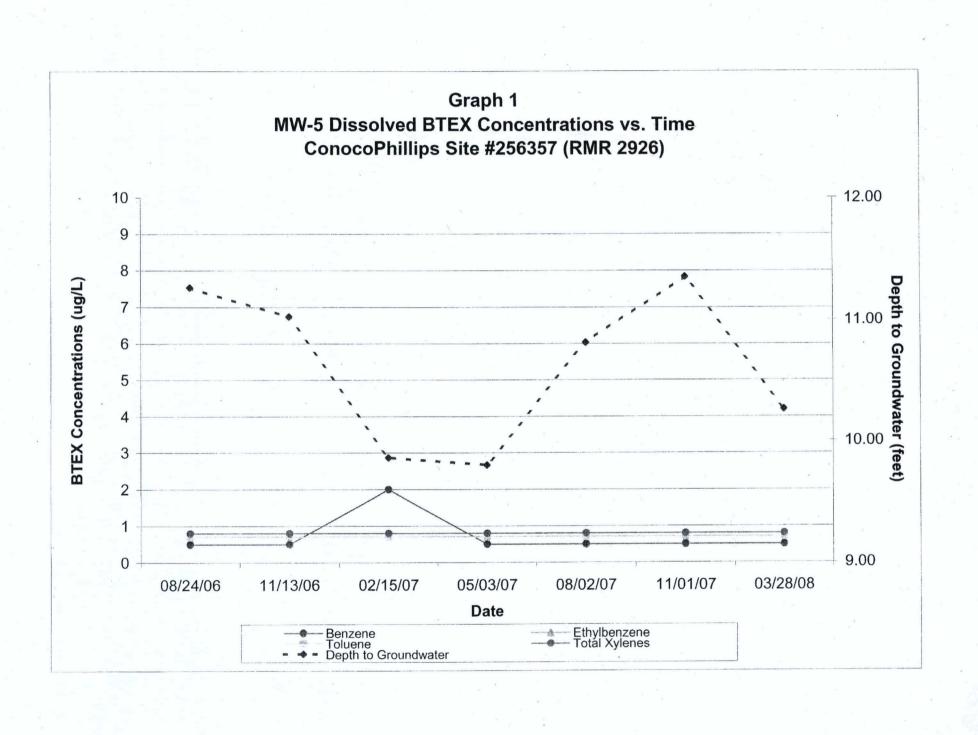
< = Less than the stated laboratory reporting limit.

Bolded values equal or exceed MTCA Method A Cleanup Levels.

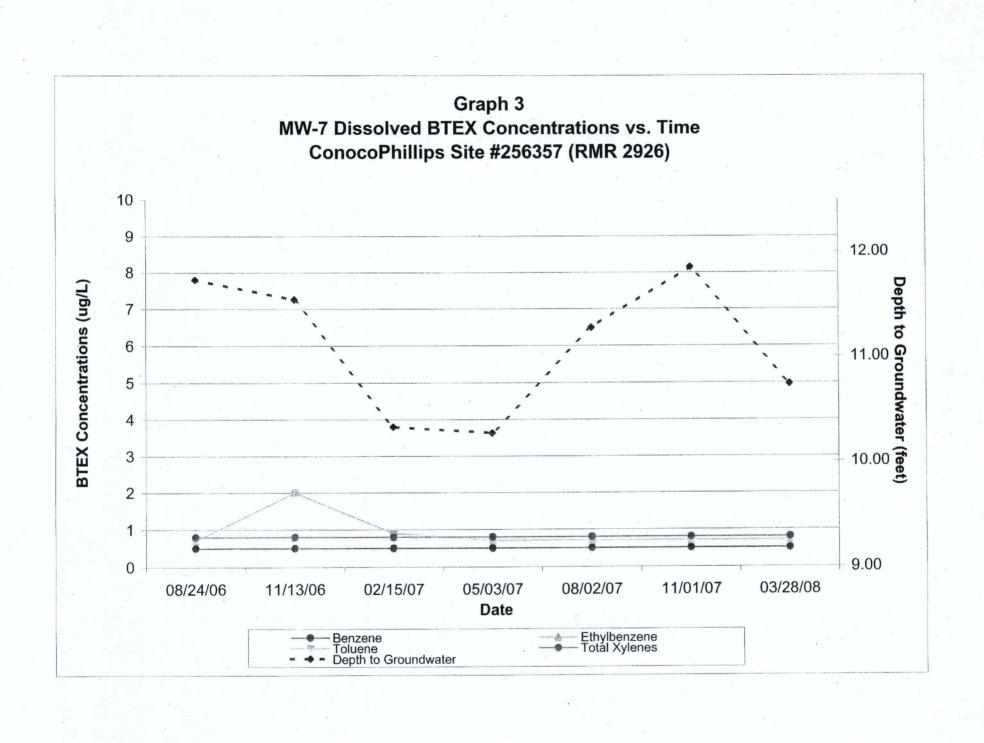
^a MTCA Method A Cleanup levels for TPH-g are 1,000 ug/L when no Benzene is present and 800 ug/L when Benzene is present.

ATTACHMENT B GRAPHS OF QUARTERLY GROUNDWATER ANALYTICAL RESULTS PER MONITORING WELL

Request for Environmental Closure ConocoPhillips Site No. 256357 3323 Marine Drive Northeast, Marysville, Washington August 18, 2008



Graph 2 MW-5 Dissolved Total Petroleum Hydrocarbon Concentrations vs. Time ConocoPhillips Site #256357 (RMR 2926) 13.00 300 12.50 12.00 **Dept** TPH Concentrations (ug/L) 250 11.50 Groundwater (10.50 area) 200 150 10.00 100 50 9.50 9.00 0 12/1/2006 4/1/2007 8/1/2007 12/1/2007 4/1/2008 8/1/2006 Date TPH-D
Depth to Groundwater TPH-G TPH-O



Graph 4

MW-7 Dissolved Total Petroleum Hydrocarbon Concentrations vs. Time
ConocoPhillips Site #256357 (RMR 2926)

